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| 10/029,087 | 12/20/2001 | Alan B. Shuey | 010071 | 3407 |

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EXAMINER

RODRIGUEZ, RUTH C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3677

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,087

Applicant(s)

SHUEY, ALAN B.

Examiner

Ruth C Rodriguez

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 22 is objected to because of the following informalities:

- Claim 22 recites the limitation "said core spring" in line 16. There is insufficient antecedent basis for this limitation in the claim.

- Claim 22 recites the limitation "said wedge" between lines 14 and 15. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Facey et al. (US 6,003,210) in view of Pasbrig (US 4,889,320).

Facey discloses a releasable cable grip connector (23) locking a cable segment (20) within a housing. The cable grip connector comprises a housing (27), a channel (26A,26B) and a wedge means (25A 25B). The housing has a first bore therethrough

(24A) to receive a first cable segment and a second bore (24B) therethrough parallel to the to the first bore to receive a second cable segment (Figs. 1a, 2a, 2b and 3-8b). The first and second bores have a diameter that permit freely passing the first and second cable segments through the bores (Figs. 1a, 2a, 2b and 3-8b). The first and second bores are straight throughout the extent of the housing (Figs. 1a, 2a, 2b and 3-8b). The channel within the housing is disposed to one side of the first bore and acutely inclined to and, at its inner end, breaking into the first bore (Fig. 8). The wedge means positioned within the housing in the channel and spring-loaded by a coil spring (31A, 31B) to bias the wedge means against the cable segment within the first bore to wedge the cable segment against the first bore and thereby grip the cable segment (C. 1, L. 8-20). The coil spring that spring loads the wedge is positioned axially within the channel so that the force generated by the coil spring acts at all times in an axial direction (Fig. 8). Facey utilizes a tool (35) to free the cable. Facey fails to disclose using a release lever extending through a slot in the body to release the cable grip. However, Pasbrig teaches a releasable cable grip connector locking a cable segment (16) within a housing (1). The cable grip connector comprising wedge means (5,5'',9), a release lever (6,6'',9',9'') and a housing (1) with a bore (15), a channel (2) and a slot (27). The channel is disposed to one side of the first bore and acutely inclined to and, its inner end, breaking into the bore (Figs. 1-7). The wedge means is positioned within the housing in the channel and spring loaded by a coil spring (4,4') to bias the wedge means against the first bore and thereby grip the cable segment (Figs. 1-7). The coil spring that spring loads the wedge means is positioned axially within the channel so that

the force of the generated by the core spring acts at all times in an axial direction (Figs. 1-7). The slot in the housing extends parallel to the channel and to the coil spring within the channel and communicates with the channel (Figs. 1a-7). The release lever is fixed to the wedge means and extends through the slot to the outside of the housing whereby the release lever may be utilized to move the wedge against the force of the coil spring the cable segment and permits movement of the cable segment relative to the first bore (C. 2, L. 7-16 and Figs. 1a, 2a, 2b and 3-7). The release of the cable is simplified because the release lever transmits the unclamping force, which that acts against the force of the spring, directly to the wedge means (C. 2, L. 11-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a release lever according to the teaching of Pasbrig in the each of the bores of the cable grip of Facey. Doing so as mentioned above, will facilitate the release of the cable because the release force will be directly applied to the release lever in order to move the wedge means against the bias of the spring. The releasable cable grip connector disclosed by Facey uses a tool to release the cable segment, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to have a release lever connected to the wedge means to replace the tool of the Facey connector as taught by Pasbrig because the release lever will be integrally connected to the housing and readily available when it is needed instead of needing a separate tool to release the wedge means where the tool may become lost.

Pasbrig also teaches that:

The wedge means has a release lever extending outwardly from each side of the roller means through respective slots in opposite sides of the housing (Figs. 1-7).

Pasbrig also teaches that the roller means has a single release lever extending outwardly of the roller means through the slot in the housing (Figs. 1-7).

The second bore within the housing disclosed by Facey permits the second cable segment to move freely within the second bore when the tool disclosed by Facey or a release lever as taught by Pasbrig is used to move the wedge means, against the force generated by the coil spring, that wedges against the cable segment disposed in the second bore.

Response to Arguments

4. Applicant's arguments filed 28 August 2003 have been fully considered but they are not persuasive.

5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner acknowledges that Facey fails to suggest the use of a release lever. However, the

motivation to combine the references by Facey and Pasbrig is found in the Pasbrig reference at column 2, lines 11-13 that recites that "The axial projections mounted directly on the clamping unit transmit the force employed for unclamping directing to the clamping unit." Therefore, the release of the cable is simplified because the release lever transmits the unclamping force, which that acts against the force of the spring, directly to the wedge means. The Examiner also provides additional motivation for the combination of both references by pointing out that the release of the wedge means is also simplified because a separate tool that could become lost is not required for the release of the wedge because a release lever connected to the wedge means is integrally connected to the housing thereby allowing quick adjustment.

6. The Applicant argues, "In the combination, the force of the coil spring urging the wedges having release levers does not act in the axial direction of the spring." The Examiner fails to be persuaded by this argument. The Applicant is only relying in Figures 8A-8C to support his argument since the embodiment shown in these figures is the one having the bore extending in a straight line through the housing. However, the rejection of claims 20-23 does not relies in these figures. The rejection is based on Figures 1A-7 that shows the force of the coil spring urging the wedges having release levers that act in the axial direction of the spring. The combination included in the prior office action and in the current office action relies in Facey for its disclosure of a housing having a pair of bore that extend in a straight line through the housing where a channel is acutely inclined into each bore and the channel houses the coil spring that spring loads the wedge means that is positioned axially within the channel so that the force

generated by the coil spring acts at all times in an axial direction. The embodiments taught by Pasbrig in Figures 1-7 also have an acutely inclined relationship between the bore and the channel where the channel houses a coil spring that spring loads the wedge means that is positioned axially within the channel so that the force generated by the coil spring acts at all times in an axial direction towards the bore with a release lever extending through a slot in the housing and extending parallel to the channel and to the coil spring within the channel. Therefore, the combination made by the Examiner includes all the limitations included in the claim.

7. Applicant's arguments with respect to claim 23 have been considered but are moot in view of the new ground(s) of rejection. The Examiner is no longer relying in the reference by Macias for the limitation included in claim 23 because the releasable cable grip connector disclosed by Facey permits the second cable segment to move freely within the second bore. Especially since the Applicant is not reciting any limitations that would preclude the Examiner from reading this limitation in the Facey reference when the wedge means is moved against the force of the spring. And even if the Applicant recites a limitation in the claim that would exclude the position where the wedge means is moved against the force of the spring, the Examiner is reciting a reference by Heisser having a free-standing releasable cable grip connector comprising a housing with two bores parallel where one bore has a wedge means to clamp a cable segment and the other bore is devoided of a wedge means to allow free movement of the cable segment.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Knoche (US 1,165,785), Pasbrig (US 3,628,221 and US 4,889,320), Moransais (US 3,709,071), Wagner (US 3,939,594), Natkins (US 6,131,969), European Patent Document EP 0 013 693 A1, Swiss Patent Document 634 249 A5 and British Patent Document GB 2 210 517 A are cited to show state of the art with respect to releasable cable grips having some of the features of the current application.

Heisser (US 1,832,388), Werterkamp (US 4,878,270) and Macias (US 5,548,873) is cited to show state of the art with respect to a cable grip connector having two bores. One bore allows free passage of a cable segment and the other bore releasably secures another segment of the cable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (703) 308-1881. The examiner can normally be reached on M-F 07:15 - 15:45.

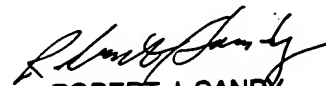
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (703) 306-4115.

Submissions of your responses by facsimile transmission are encouraged. Technology center 3600's facsimile number for before final communications is (703) 872-9326. Technology center 3600's facsimile number for after final communications is (703) 872-9327.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

RCR
rcr
November 17, 2003


ROBERT J. SANDY
PRIMARY EXAMINER